

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

**PCT**

WRITTEN OPINION

(PCT Rule 66)

<b>To:</b> GARY A. WALPERT FISH & RICHARDSON, P.C. 225 FRANKLIN STREET BOSTON, MASSACHUSETTS 02110-2804  <i>APR 30 1999</i>
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Date of Mailing  
(day/month/year)

**28 APR 1999**

Applicant's or agent's file reference  [REDACTED]	REPLY DUE	within TWO months from the above date of mailing
International application No.	International filing date (day/month/year)	Priority date (day/month/year)
PCT/US98/03694	24 FEBRUARY 1998	24 FEBRUARY 1997
International Patent Classification (IPC) or both national classification and IPC IPC(6): G06F 17/60 and US Cl.: 705/10; 455/419, 420; 364/468.05, 468.12		
Applicant WILDFIRE COMMUNICATIONS, INC.		

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I  Basis of the opinion
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step or industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

**DOCKETED BY BILLING SECRETARY**

Due Date 2016/28/99

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RECD written opn'n 6/28/99  
for signalt(a) 7/28/99

USPTO

3. The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.  
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 24 JUNE 1999

Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231  Facsimile No. (703) 305-3230	Authorized officer  <b>FRANTZY POINVIL</b> <i>Berwynne Zoyer</i> Telephone No. (703) 305-9779
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## WRITTEN OPINION

International application No.

PCT/US98/03694

**I. Basis of the opinion**

1. This opinion has been drawn on the basis of (*Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

the international application as originally filed.

the description, pages 1-16, as originally filed.  
pages NONE, filed with the demand.  
pages NONE, filed with the letter of \_\_\_\_\_

the claims, Nos. 1-27, as originally filed.  
Nos. NONE, as amended under Article 19.  
Nos. NONE, filed with the demand.  
Nos. NONE, filed with the letter of \_\_\_\_\_

the drawings, sheets/fig 1-3, as originally filed.  
sheets/fig NONE, filed with the demand.  
sheets/fig NONE, filed with the letter of \_\_\_\_\_

2. The amendments have resulted in the cancellation of:

the description, pages NONE

the claims, Nos. NONE

the drawings, sheets/fig NONE

3.  This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the **Supplemental Box** Additional observations below (Rule 70.2(c)).

4. Additional observations, if necessary:

NONE

## WRITTEN OPINION

International application No.

PCT/US98/03694

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>1-27</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1-27</u>	NO
Industrial Applicability (IA)	Claims <u>12-17, 21-27</u>	YES
	Claims <u>1-11, 18-20</u>	NO

**2. CITATIONS AND EXPLANATIONS**

(See Supplemental Sheet.)

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**V. 2. REASoNED STATEMENTS - CITATIONS AND EXPLANATIONS (Continued):**

Claims 1 - 11 and 18 - 20 lack industrial applicability under PCT Article 33(4) because the subject matter claimed cannot be made or used in any industry. In particular, the claims are directed toward an abstract idea, namely a method of gathering usage data and informing a user when his/her usage exceeds a predetermined threshold, which in and of itself, fails to recite statutory subject matter.

Although the application clearly discloses at page 4 of the Specification that the invention is to be implemented on a computer, the above-referenced claims recite a method for gathering data, determining when a pattern in the data has been identified or a threshold reached, and informing the user of a product upgrade indicated by said pattern or threshold. The Examiner asserts that such a method could easily be implemented manually without aid of any processing device. No apparatus is claimed, and, in particular, no computer or processing means is claimed that would raise the concepts disclosed from the level of data analysis to that of a patentable invention.

It is fundamental patent law that an idea, without means to implement it, is not eligible for patent protection. Similarly, simple manipulation of the idea, such as gathering data and determining when a pattern or threshold has been recognized, is insufficient to qualify as statutory subject matter. A manipulation of usage data, without the apparatus to effect the analysis and offering to the user, is not of itself patentable.

The Examiner respectfully suggests adding language similar to "a computer-implemented method for . . ." to independent Claims 1 and 18 to clearly denote the implementation of the invention on a computer.

Claims 1 - 11, 18 - 20, and 22 - 27 lack an inventive step under PCT Article 33(3) as being obvious over "NSP to Install Wireless Network Meter Reading System", Electric Light & Power, pages 23+, November 1996 (hereinafter "NSP") in view of Jason Meyers, "CDMA Gets its Day in the Sun", Telephony, v 230, n 21, page 8, May 20, 1996 (hereinafter "CDMA").

(A) As to Claim 1, NSP discloses a computer-based system for determining which additional value-added products and services should be offered to customers based on those customers' past usage practices (NSP at page 1, lines 18 - 22). NSP collects data regarding customers' energy usage, analyzes the data to determine how the customers are consuming energy, and offers customers additional products and services, based on the customers' usage patterns (NSP at page 1, lines 18 - 34). Although NSP discloses offering customers additional products and features, it does not expressly teach offering upgraded features of existing products and services. However, CDMA is an article disclosing the release of upgraded cellular services to the customers of AirTouch Communications, Inc. in the Los Angeles, California market. In particular, CDMA discloses offering greater cellular communications functionality based on past usage patterns (CDMA at page 1, lines 14 - 16 and 36 - 37). It would have been obvious to one of ordinary skill in the art of resource management to modify NSP with the patterned upgrade offering method of CDMA. One would be motivated to do so to avoid a broad marketing effort in favor of hand-picking those customers most qualified to utilize the upgraded functions (CDMA at page 1, lines 35 - 41; NSP at page 1, lines 22 - 24).

(B) As to Claim 2, NSP discloses collecting interval of use data (page 1, lines 27 - 31).

(C) As to Claims 3 - 5, NSP discloses a computer-based system for determining which additional value-added products and services should be offered to customers based on those customers' past usage practices. Although NSP discloses collecting statistical data regarding use of products and services (NSP at page 1, lines 39 - 42), it does not teach collection of demographic or geographic data for analysis. However, the Examiner asserts that the use of geographic/demographic data is well-known in fields of customer usage analysis and would have been obvious data for the skilled artisan to utilize ( see "Walk a Mile in Their Shoes", Cellular Business, page x+, October 1996 at page 1, lines 44 - 49).

(D) As to Claim 6, although NSP does not teach a threshold at which customers are offered upgraded products, CDMA discloses determining whether a threshold has been exceeded as indicated by usage data such that the user is to be offered communications upgrades (CDMA at page 1, lines 35 - 37).

(E) As to Claim 7, although both NSP and CDMA disclose analysis of product usage data to determine whether a data pattern can be identified, neither article expressly teaches application of a fuzzy algorithm to said analysis. However, the Examiner asserts that use of a fuzzy algorithm is merely a design choice from among a plurality of known analysis methods.

(F) As to Claim 8, NSP discloses interactively communicating with users (page 1, lines 27 - 49).

(G) As to Claim 9, the Examiner asserts that interactive voice communication is well known in the art and would have therefore been an obvious method of communication with the user, especially in a phone technology communications system (see Specification at page 5, lines 14 - 30).

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 11

(H) As to Claim 10, the Examiner asserts that computer displays, touch screens, and keypads are well known means of communication between computer systems and users (see Thompson at Fig 3 and Col 2, line 60 - Col 3, line 6).

(I) As to Claim 11, NSP discloses collecting data from a plurality of users (page 1, lines 18 - 22). As regards collecting user decision data, the Examiner asserts that product usage is often the result of overt user decisions, and, therefore, product usage data necessarily implicates user decision data ( see NSP at page 1, lines 27 - 31). The remaining limitations of Claim 11 are found in Claim 1, and the remainder of this claim is objected to for the same reasons.

(J) The limitations of Claim 18 are found in Claims 1 and 6, and this claim is objected to for the same reasons.

(K) The limitations of Claims 19 and 20 are found in Claims 2 and 3, respectively, and these claims are objected to for the same reasons.

(L) The limitations of Claims 22 - 24 are found in Claims 1 - 3, respectively, and these claims are objected to for the same reasons.

(M) The limitations of Claim 25 are found in Claims 1 and 6, and this claim is objected to for the same reasons.

(N) The limitations of Claims 26 and 27 are found in Claims 2 and 3, respectively, and these claims are objected to for the same reasons.

Claims 12 - 17 and 21 lack an inventive step under PCT Article 33(3) as being obvious over NSP and CDMA as applied to Claim 1 above, and further in view of Thompson et al. (U.S. Patent No. 5,335,276).

(A) As to Claim 12, and as discussed above regarding Claim 1, NSP discloses a computer-based system for determining which additional value-added products and services should be offered to customers based on those customers' past usage practices. CDMA discloses offering greater cellular telephone communications functionality based on customer usage patterns. While neither NSP nor CDMA disclose application of usage analysis to telephone personal assistant systems, Thompson teaches simplified upgradability of telephone personal assistant devices such that the devices are customized to each customer's usage (Thompson at abstract; Col 3, lines 21 - 26 and 36 - 40; Col 5, lines 59 - 65). The motivation to modify NSP and CDMA with the personal assistant means of Thompson would be to extend the upgrade offerings of CDMA's cellular network to the actual cellular telephones in use on the network (see Thompson at Col 3, line 56 - Col 4, line 11). The remaining limitations of Claim 12 are found in Claim 1, and the remainder of this claim is objected to for the same reasons.

(B) The limitations of Claim 13 are found in Claims 1 and 6, and this claim is objected to for the same reasons.

(C) The limitations of Claim 14 are found in Claim 11, and this claim is objected to for the same reasons.

(D) The limitations of Claim 15 are found in Claims 8 and 9, and this claim is objected to for the same reasons.

(E) The limitations of Claim 16 are found in Claims 1 and 10, and this claim is objected to for the same reasons.

(F) As to Claim 17, CDMA discloses offering greater functionality dependent on usage patterns (page 1, lines 35 - 37). The Examiner asserts that by being eligible for greater functionality, the users by necessity were started at a lower functionality level.

(G) The limitations of Claim 21 are found in Claims 1, 6, and 12, and this claim is

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

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objected to for the same reasons.

**----- NEW CITATIONS -----**

US 5,335,276 A (THOMPSON et al.) 2 AUGUST 1994, see abstract; Col 2, line 60 - Col 4, line 11; Col 5, lines 59 - 65; Fig 3.